

REMARKS

The claims are 20 to 31.

The above amendment to the specification will be discussed below.

The above amendment presents a new set of claims responsive to the rejections under 35 U.S.C. 112.

Claims 8-19 have been rejected under 35 U.S.C. 103 as being unpatentable over U.S. 5,942,056 to Singh.

This rejection is respectfully traversed.

Singh discloses a Bi-based leadless copper alloy including a mischmetal containing 0 to 1.0% by weight of Te and Pb as an unavoidable impurity. In this alloy, however, the mischmetal and Te form a compound and, as a result, an intermetallic compound of Pb-Te cannot be produced. It is considered that the mischmetal is bonded to Te to inhibit the Te and Pb from being bonded to each other. That is to say, the presence of mischmetal deteriorates the effect of improving a high-temperature characteristic which Te provides.

On the other hand, in the copper alloy of the present invention, an intermetallic compound of Pb-Te is formed to suppress the generation of a binary eutectic crystal of Bi-Pb, thereby improving the tensile strength of the alloy at high temperatures. Therefore, the present invention differs greatly from Singh in this respect.

This difference will be clarified from the enclosed Rule 132 Declaration comparing the experimental results between the present invention and Singh. It will be seen from the enclosed EDX analysis photographs, that an intermetallic compound of Pb-Te cannot be obtained.

It is particularly found from the photographs that the components belonging to the mischmetal (9 to 11) exist at the same site as Te. This proves that each of these components forms an intermetallic compound in cooperation with Te. That is to say, the mischmetal (Ms) and Te exist as an intermetallic compound in the form of Ms-Te bonded in the alloy, from which it is understood that the mischmetal inhibits bonding of Te and Pb.

In view of the above fact, "mischmetal" has been deleted from page 7a, line 22, of the present specification.

Accordingly, the rejection on Singh is untenable and should be withdrawn.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

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